***COMPLETE IN NOTEBOOK! COPY ALL FIGURES!***

CW43/HW43: Area in the Coordinate Plane

**Geometry  
Due: Wednesday, December 7th   
Due**

**READ ALL DIRECTIONS! Failure to show** ALL WORK **and follow** all directions COMPLETELY **will result in LaSalle.**

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| You will be able to compute the area of a shaded region created by shapes in other shapes. | |
| Criteria for Success: Did you…   * Correctly lines on the points on a graph * Identify the correct shape * Use the correct area formula * Determine the side lengths * Examine your answer: Does it answer the question? Does it make sense? Include units? | |
| 1. What is the area of the region bound by , , and ? | 2. What is the area of the region bound by , , y=10, and x=2? |
| 3. Plot line k, . What is the area bound by line k and the x and y-axis? | 4. What is the area of the region bound by , , and ? |
| 5. What is the area bound by the x & y-axis and the line ? | 6. What is the area bound by the x & y-axis and the line ? |
| Break 1: Lines that are y= any constant, are always… How are you going to remember that? | Break 2: Explain the process of graphing a line. |
| 7. The area of a rectangle is 80 units2. If the x and y axis make up two of the sides, what are the possible equations for the remaining sides? | 8. A region is bound by the lines ,  , and the x- axis. What is the area of the bounded region? |
| 9. What is the area bound by the lines , , and ? | 10. What is the area bound by the lines , and ? |
| Break 3: In the context of these problems, what does the word bound mean? | Break 4: What does it mean when the lines intersect? |

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| You will be able to write the equation for the lines that create a shape in the coordinate plane, given the vertices. | |
| Directions: Plot the points. Write the equation for the line of each side. | |
| 11. The triangle ABC with vertices A(-3,1), B(1,3), and C(2,-4). | 12 The quadrilateral HUIR with vertices H(-5,-2), U(-4,3), I(-2,3), and R(0,-1). |
| 13. The quadrilateral KNDF with vertices K(0,-1), N(-1,-4), D(-3,-2), and F(-2,1). | 14. The triangle ULF with vertices U(-3,0), L(-2,4), and F(-1,1). |